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FIG. 1a

FIG. 1b

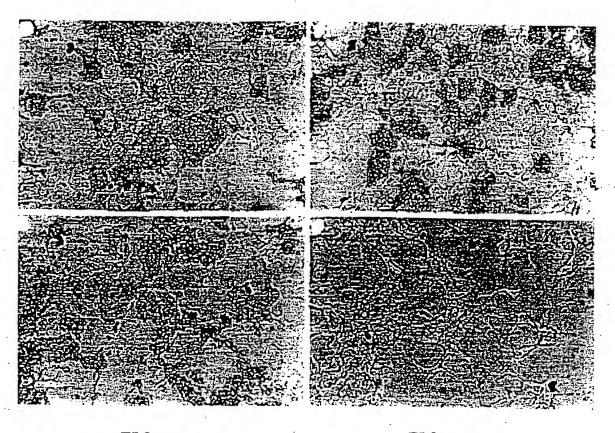
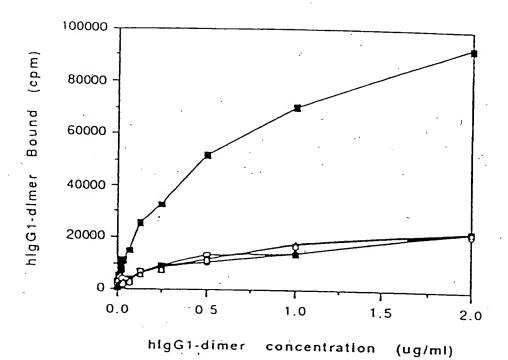


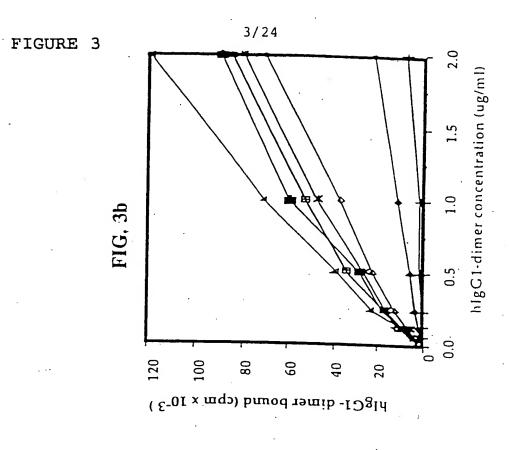
FIG. 1c

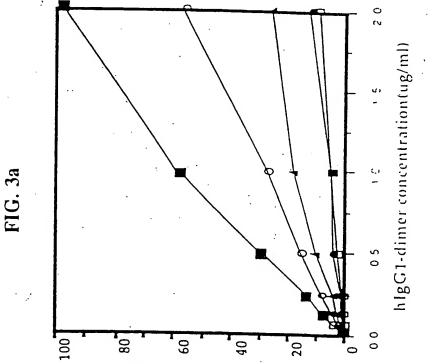
FIG. 1d

FIGURE 2

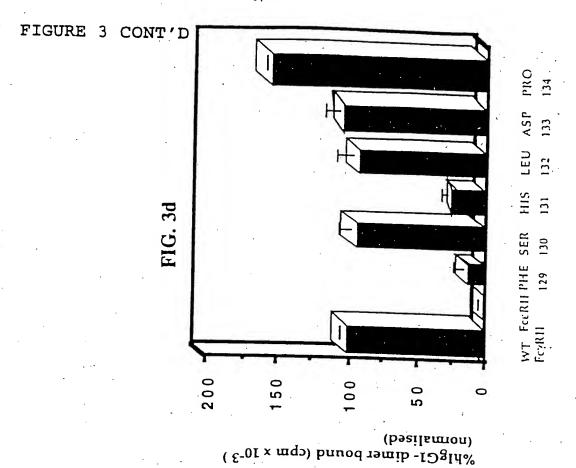


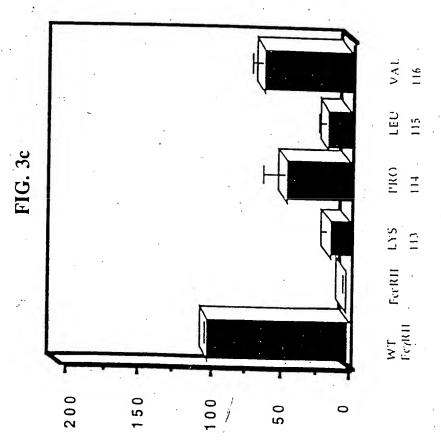


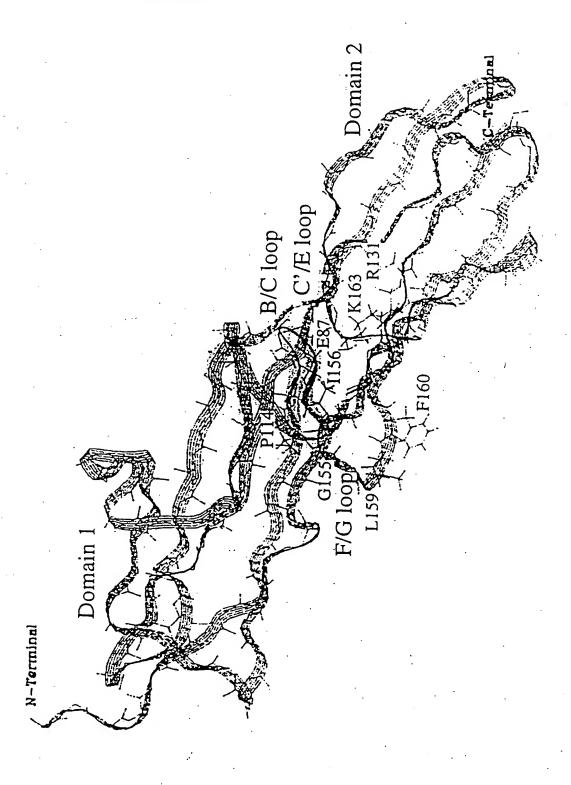




hlgG1- dimer bound (cpm x  $10^{-3}$ )







huFceRla chain C'-E, F-G loop Ala mutant oligo nucleotides

F-G loop

٥

25

e154 (Lys) 
Ala EFG-01 + EFG-02

EFG-01: 5' CTGTACGGGCGCAGTGTGGCAGC 3'

EFG-02: 5' GCTGCCACACTGCGCCCGTACAG 3'

10 e155 (Val) \* Ala EFG-03+EFG-04

EFG-03: 5' GTACCGGCAAAGCATGGCAGCTGG 3'

EFG-04: 5' CCAGCTGCCATGCTTTGCCCGTAC 3'

e156 (Trp) 
Ala EFG-05+EFG-06

15 EFG-05: 5' GGGCAAAGTGGCACAGCTGGAC 3'

EFG-06: 5' GTCCAGCTGTGCCACTTTGCCC 3'

e157 (Gln) O Ala EFG-07+EFG-08

EFG-07: 5' GCAAAGTGTGGGCACTGGACTATG 3'

20 EFG-08: 5' CATAGTCCAGTGCCCACACTTTGC 3'

e158 (Leu) • Ala EFG-09+EFG-10

EFG-09: 5' GTGTGGCAGGCAGACTATGAGTC 3'

EGG-10: 5' GACTCATAGTCTGCCTGCCACAC 3'

e159 (Asp) • Ala EFG-11+EFG-12

EFG-11: 5' GTGGCAGCTGGCATATGAGTCTG 3'

EFG-12: 5' CAGACTCATATGCCAGCTGCCAC 3'

30 e160 (Tyr) • Ala EFG-13+EFG-14

EFG-13: 5' GCAGCTGGACGCAGAGTCTGAGC 3'

EFG-14: 5' GCTCAGACTCTGCG/TCCAGCTGC 3'

#### 7/24

Figure 5 cont.

el61 (Glu) O Ala

EFG-07+EFG-08

EFG-15:

5' GCTGGACTATGCATCTGAGCCCC 3'

EFG-16:

5' GGGGCTCAGATGCATAGTCCAGC 3'

C'-E loop

el29 (Tyr) O Ala

EBS-01+EBS-02

EBS-01: 5' GCTCTCAAGGCATGGTATGAGAAC 3'

EBS-02: 5' GTTCTCATACCATGCCTTGAGAGC 3'

10

e130 (Trp) 
Ala

EBS-03+EBS-04

EBS-03:

5' CTCAAGTACGCATATGAGAACCAC 3'

EBS-04:

5' GTGGTTCTCATATGCGTACTTGAG 3'

15 e131 (Tyr) • Ala

EBS-01 + EBS-02

EBS-05: 5' CAAGTACTGGGCAGAGAACCAC 3'

EBS-06:

5' GTGGTTCTCTGCCCAGTACTTG 3'

e132 (Glu) Ala

EBS-07+EBS-08

20 EBS-07:

5' GTACTGGTATGCAAACCACAACATC 3'

EBS-08:

5' GATGTTGTGGTTTGCATACCAGTAC 3'

e133 (Asn) 
Ala

EBS-09+EBS-10

EBS-09:

5' CTGGTATGAGGCACACATCTCC 3'

EBS-10:

5' GGAGATGTTGTGTGCCTCATACCAG 3'

e134 (His) O Ala

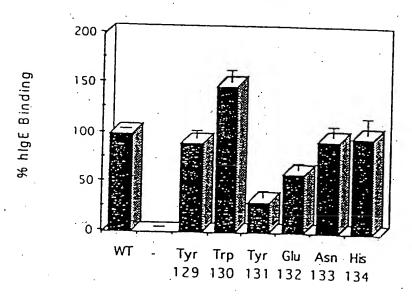
EBS-11+EBS-12

EBS-11:

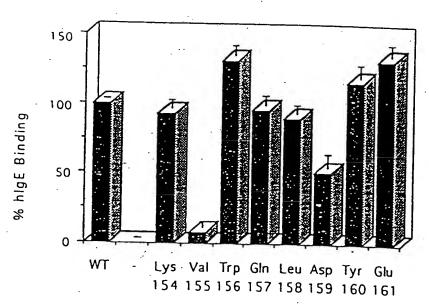
5' GGTATGAGAACGCAAACATCTCCATTAC 3'

EBS-12:

5' GTAATGGAGATGTTTGCGTTCTCATACC 3'



F-G LOOP



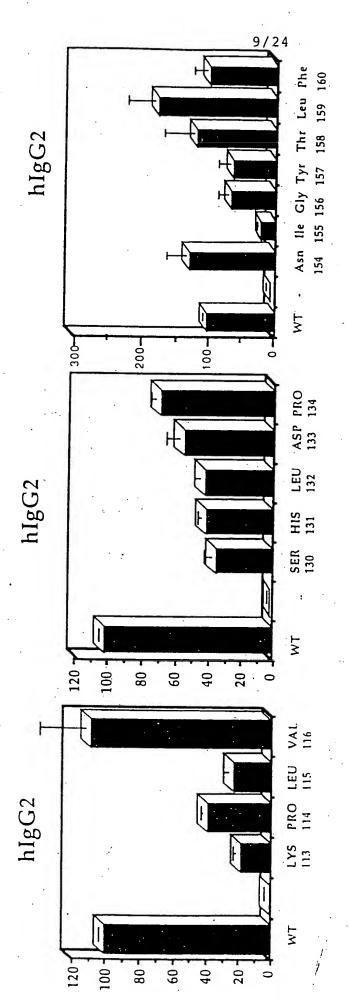
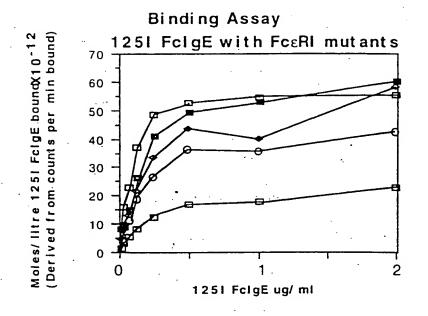


FIGURE 7 CONT'D..

FIGURE 8



#### **LEGEND**

- a : FF
- G
- Β' εεγ
- Ο γεγ
- п cc.

W7~

. ...

Y26

**Y3** 

hagg

1302

8.7

8.50

IVE

8-7

FIGURE 10

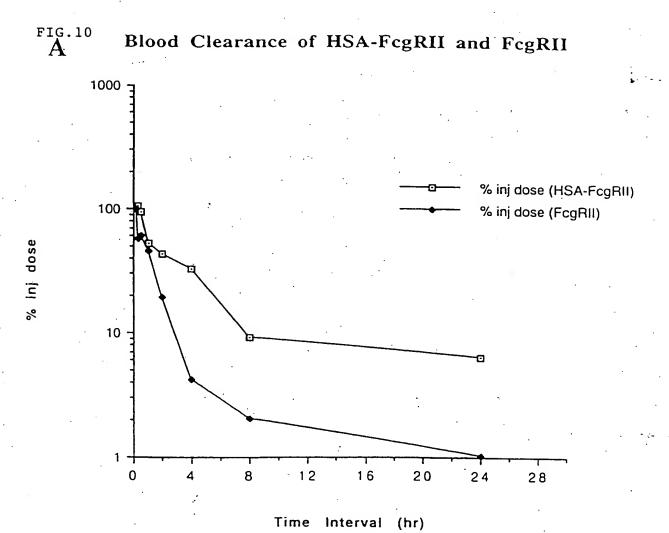


FIGURE 10 CONT'D..

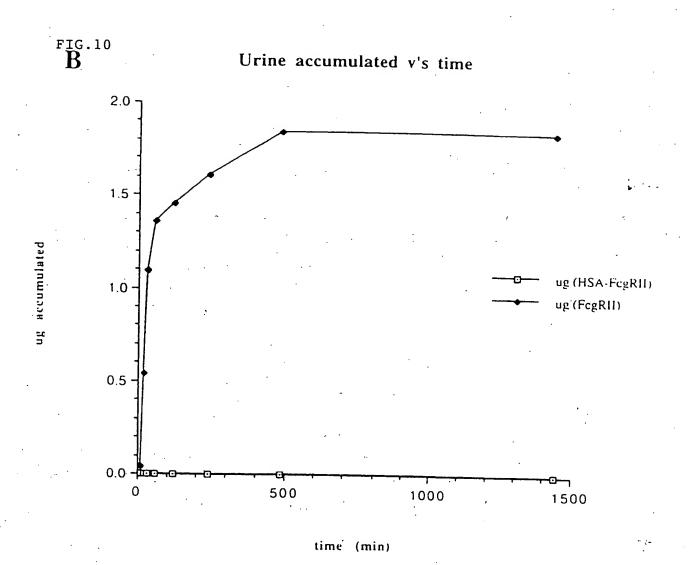
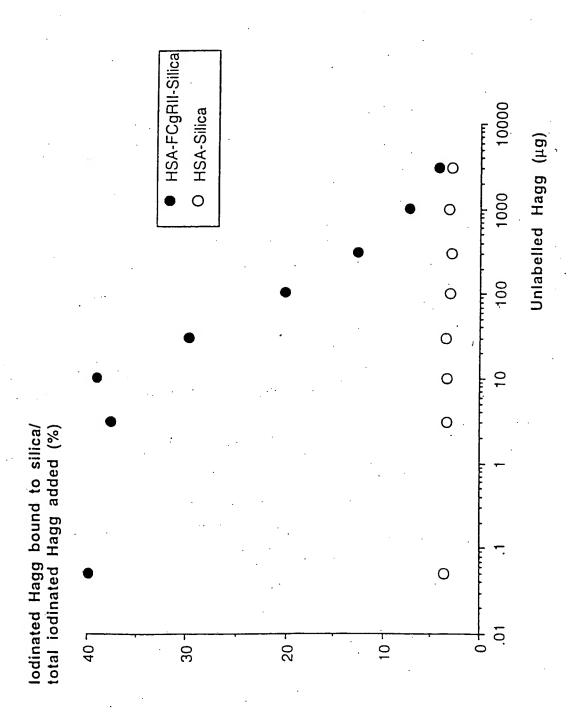


FIGURE 11



1261/421

31/11 GAT GCA CAC AAG AGT GAG GTT GCT CAT CGG TTT AAA GAT TTG GGA GAA GAA AAT TTC AAA asp ala his lys ser glu val ala his arg phe lys asp leu gly glu glu asn phe lys 61/21 91/31 GCC TTG GTG TTG ATT GCC TTT GCT CAG TAT CTT CAG CAG TGT CCA TTT GAA GAT CAT GTA ala leu val leu ile ala phe ala gln tyr leu gln gln cys pro phe glu asp his val 151/51 AAA TTA GTG AAT GAA GTA ACT GAA TTT GCA AAA ACA TGT GTT GCT GAT GAG TCA GCT GAA lys leu val asn glu val thr glu phe ala lys thr cys val ala asp glu ser ala glu 181/61 211/71 AAT TGT GAC AAA TCA CTT CAT ACC CTT TTT GGA GAC AAA TTA TGC ACA GTT GCA ACT CTT asn cys asp lys ser leu his thr leu phe gly asp lys leu cys thr val ala thr leu 241/81 271/91 CGT GAA ACC TAT GGT GAA ATG GCT GAC TGC TGT GCA AAA CAA GAA CCT GAG AGA AAT GAA arg glu thr tyr gly glu met ala asp cys cys ala lys gln glu pro glu arg asn glu 331/111 TGC TTC TTG CAA CAC AAA GAT GAC AAC CCA AAC CTC CCC CGA TTG GTG AGA CCA GAG GTT cys phe leu gln his lys asp asp asn pro asn leu pro arg leu val arg pro glu val 361/121 391/131 GAT GTG ATG TGC ACT GCT TTT CAT GAC AAT GAA GAG ACA TTT TTG AAA AAA TAC TTA TAT asp val met cys thr ala phe his asp asn glu glu thr phe leu lys lys tyr leu tyr 451/151 GAA ATT GCC AGA AGA CAT CCT TAC TTT TAT GCC CCG GAA CTC CTT TTC TTT GCT AAA AGG glu ile ala arg arg his pro tyr phe tyr ala pro glu leu leu phe phe ala lys arg 511/171 TAT AAA GCT GCT TTT ACA GAA TGT TGC CAA GCT GCT GAT AAA GCT GCC TGC CTG TTG CCA tyr lys ala ala phe thr glu cys cys gln ala ala asp lys ala ala cys leu leu pro 541/181 571/191 AAG CTC GAT GAA CTT CGG GAT GAA GGG AAG GCT TCG TCT GCC AAA CAG AGA CTC AAG TGT lys leu asp glu leu arg asp glu gly lys ala ser ser ala lys gln arg leu lys cys 601/201 631/211 GCC AGT CTC CAA AAA TTT GGA GAA AGA GCT TTC AAA GCA TGG GCA GTA GCT CGC CTG AGC ala ser leu gln lys phe gly glu arg ala phe lys ala trp ala val ala arg leu ser 661/221 691/231 CAG AGA TTT CCC AAA GCT GAG TTT GCA GAA GTT TCC AAG TTA GTG ACA GAT CTT ACC AAA gln arg phe pro lys ala glu phe ala glu val ser lys leu val thr asp leu thr lys 721/241 751/251 GTC CAC ACG GAA TGC TGC CAT GGA GAT CTG CTT GAA TGT GCT GAT GAC AGG GCG GAC CTT val his thr glu cys cys his gly asp leu leu glu cys ala asp asp arg ala asp leu 811/271 GCC AAG TAT ATC TGT GAA AAT CAA GAT TCG ATC TCC AGT AAA CTG AAG GAA TGC TGT GAA ala lys tyr ile cys glu asn gln asp ser ile ser ser lys leu lys glu cys cys glu 841/281 871/291 AAA CCT CTG TTG GAA AAA TCC CAC TGC ATT GCC GAA GTG GAA AAT GAT GAG ATG CCT GCT lys pro leu leu glu lys ser his cys ile ala glu val glu asn asp glu met pro ala 901/301 931/311 GAC TTG CCT TCA TTA GCT GCT GAT TTT GTT GAA AGT AAG GAT GTT TGC AAA AAC TAT GCT asp leu pro ser leu ala ala asp phe val glu ser lys asp val cys lys asn tyr ala 961/321 991/331 GAG GCA AAG GAT GTC TTC CTG GGC ATG TTT TTG TAT GAA TAT GCA AGA AGG CAT CCT GAT glu ala lys asp val phe leu gly met phe leu tyr glu tyr ala arg arg his pro asp 1021/341 1051/351 TAC TCT GTC GTG CTG CTG AGA CTT GCC AAG ACA TAT GAA ACC ACT CTA GAG AAG TGC tyr ser val val leu leu leu arg leu ala lys thr tyr glu thr thr leu glu lys cys 1081/361 1111/371 TGT GCC GCT GCA GAT CCT CAT GAA TGC TAT GCC AAA GTG TTC GAT GAA TTT AAA CCT CTT cys ala ala ala asp pro his glu cys tyr ala lys val phe asp glu phe lys pro leu 1171/391 GTG GAA GAG CCT CAG AAT TTA ATC AAA CAA AAT TGT GAG CTT TTT GAG CAG CTT GGA GAG val glu glu pro gln asn leu ile lys gln asn cys glu leu phe glu gln leu gly glu 1231/411 TAC AAA TTC CAG AAT GCG CTA TTA GTT CGT TAC ACC AAG AAA GTA CCC CAA GTG TCA ACT tyr lys phe gln asn ala leu leu val arg tyr thr/lys lys val pro gln val ser thr

1291/431

#### FIGURE 12 CONT'D...

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CCA ACT CTT GTA GAG GTC TCA AGA AAC CTA GGA AAA GTG GGC AGC AAA TGT TGT AAA CAT
pro thr leu val glu val ser arg asn leu gly lys val gly ser lys cys cys lys his
1321/441
                                         1351/451
CCT GAA GCA AAA AGA ATG CCC TGT GCA GAA GAC TAT CTA TCC GTG GTC CTG AAC CAG TTA
pro glu ala lys arg met pro cys ala glu asp tyr leu ser val val leu asn gln leu
                                         1411/471
TGT GTG TTG CAT GAG AAA ACG CCA GTA AGT GAC AGA GTC ACA AAA TGC TGC ACA GAA TCC
cys val leu his glu lys thr pro val ser asp arg val thr lys cys cys thr glu ser
1441/481
                                         1471/491
TTG GTG AAC AGG CGA CCA TGC TTT TCA GCT CTG GAA GTC GAT GAA ACA TAC GTT CCC AAA
leu val asn arg arg pro cys phe ser ala leu glu val asp glu thr tyr val pro lys
1501/501
                                         1531/511
GAG TTT AAT GCT GAA ACA TTC ACC TTC CAT GCA GAT ATA TGC ACA CTT TCT GAG AAG GAG
glu phe asn ala glu thr phe thr phe his ala asp ile cys thr leu ser glu lys glu
1561/521
                                         1591/531
AGA CAA ATC AAG AAA CAA ACT GCA CTT GTT GAG CTC GTG AAA CAC AAG CCC AAG GCA ACA
arg gln ile lys lys gln thr ala leu val glu leu val lys his lys pro lys ala thr
                                         1651/551
AAA GAG CAA CTG. AAA GCT GTT ATG GAT GAT TTC GCA GCT TTT GTA GAG AAG TGC TGC AAG
lys glu gln leu lys ala val met asp asp phe ala ala phe val glu lys cys cys lys
1681/561
                                         1711/571
GCT GAC GAT AAG AAG ACC TGC TTT GCC GAG GAG GGT AAA AAA CTT GTT GCT GCA AGT CAA
ala asp asp lys lys thr cys phe ala glu glu gly lys leu val ala ala ser gln
1741/581
                                        1771/591
GCT GCC TTA GGC GCT CCC CCA AAG GCT GTG CTG AAA CTT GAG CCC CCG TGG ATC AAC GTG
ala ala leu gly ala pro pro lys ala val leu lys leu glu pro pro trp ile asn val
1801/601
                                        1831/611
CTC CAG GAG GAC TCT GTG ACT CTG ACA TGC CAG GGG GCT CGC AGC CCT GAG AGC GAC TCC
leu gln glu asp ser val thr leu thr cys gln gly ala arg ser pro glu ser asp ser
1861/621
                                        1891/631
ATT CAG TGG TTC CAC AAT GGG AAT CTC ATT CCC ACC CAC ACG CAG CCC AGC TAC AGG TTC
ile gln trp phe his asn gly asn leu ile pro thr his thr gln pro ser tyr arg phe
                                        1951/651
AAG GCC AAC AAC AAT GAC AGC GGG GAG TAC ACG TGC CAG ACT GGC CAG ACC AGC CTC AGC
lys ala asn asn asp ser gly glu tyr thr cys gln thr gly gln thr ser leu ser
                                        2011/671
GAC CCT GTG CAT CTG ACT GTG CTT TCC GAA TGG CTG GTG CTC CAG ACC CCT CAC CTG GAG
asp pro val his leu thr val leu ser glu trp leu val leu gln thr pro his leu glu
                                        2071/691
TTC CAG GAG GGA GAA ACC ATC ATG CTG AGG TGC CAC AGC TGG AAG GAC AAG CCT CTG GTC
phe gln glu gly glu thr ile met leu arg cys his ser trp lys asp lys pro leu val
2101/701
                                        2131/711
AAG GTC ACA TTC TTC CAG AAT GGA AAA TCC CAG AAA TTC TCC CAT TTG GAT CCC ACC TTC
lys val thr phe phe gln asn gly lys ser gln lys phe ser his leu asp pro thr phe
                                        2191/731
TCC ATC CCA CAA GCA AAC CAC AGT CAC AGT GGT GAT TAC CAC TGC ACA GGA AAC ATA GGC
ser ile pro gln ala asn his ser his ser gly asp tyr his cys thr gly asn ile gly
2221/741
                                        2251/751
TAC ACG CTG TTC TCA TCC AAG CCT GTG ACC ATC ACT GTC CAA TAG
tyr thr leu phe ser ser lys pro val thr ile thr val gln AMB
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FIGURE 13

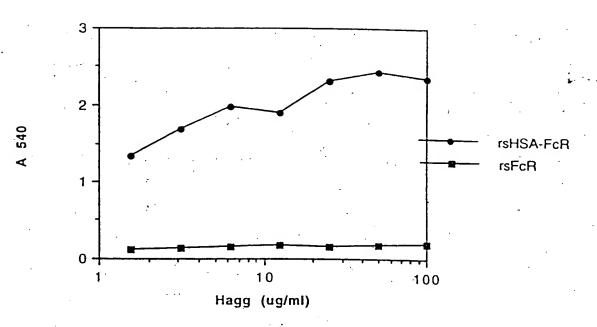
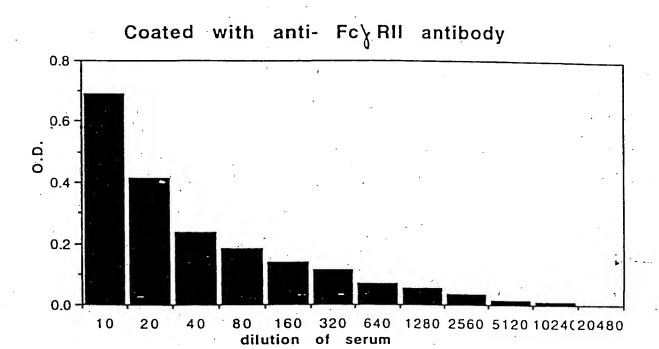
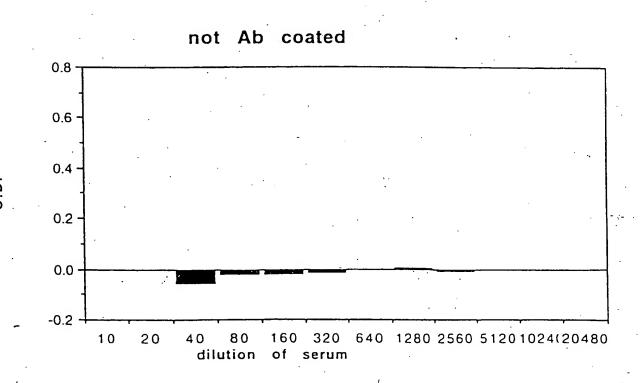
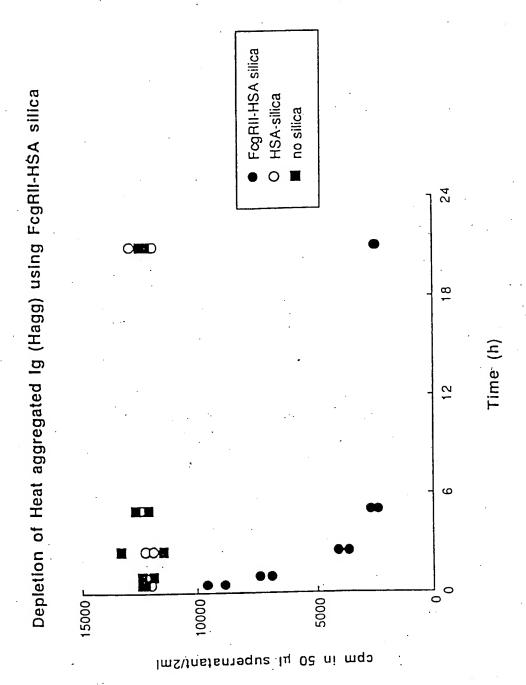
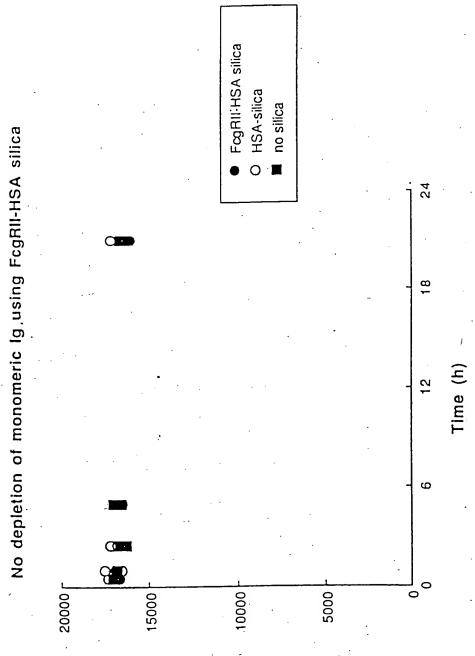


FIGURE 14





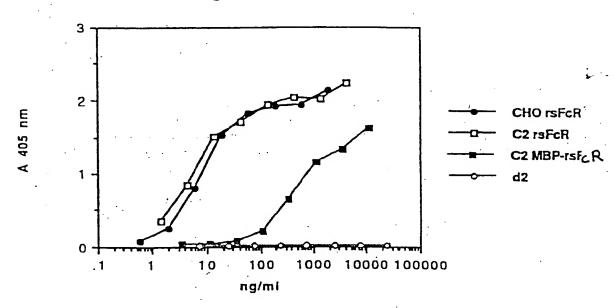




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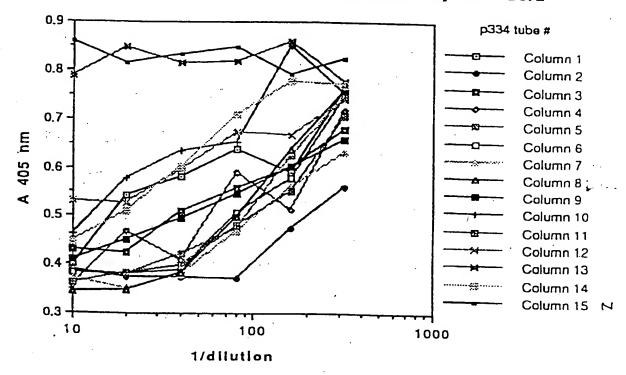
### Functional soluble FeyRII detected binding to hagg using the MoAb 8.2

## Titration of rsFcgRII from various sources



Human serum containing rhuematoid factors, but not normal human sera, inhibits the binding of HRP conjugated to rsHSA-FcyRII to hagg.

# Inhibition of HRP labelled rsHSA-FcgRII by RF+ sera



| Peptoid<br>name   | A 405 nm<br>(X 1000)  | Peptoid<br>name  | A 405 nm<br>(X 1000)  |
|---|---|--|---|
| TC,1 AD,1 DC,1 SC,1. AC,1 RC,1 RC,1 UC,1 LC,1 FC,1 JC,1 HC,1 QC,1 GC,1 CU,1 MC,1 EC,1 DG,1 IC,1 CF,1 CF,1 | 308.5<br>317<br>319<br>319<br>320<br>323.5<br>329.5<br>329.5<br>330.5<br>332.5<br>335<br>343<br>345.5<br>346.5<br>356<br>357<br>358<br>359.5<br>363<br>363<br>364 | NB.1 BD.1 OA.1 DJ.1 LG.1 VF.1 OG.1 DS.1 IF.1 RA.1 DL.1 QB.1 QF.1 EU.1 JE.1 DQ.1 AF.1 SB.1 HA.1 IG.1 HB.1 DO.1 RB.1 | 578.5<br>580<br>582.5<br>586.5<br>586.5<br>586.5<br>587.<br>588.<br>589.5<br>591.<br>592.<br>592.<br>592.<br>592.<br>592.<br>592.<br>594.<br>594.<br>594.<br>596.<br>596.5<br>596.5 |
| VC,1  | 364   | Background<br>Ma <b>ximum</b>  | 304<br>619  |